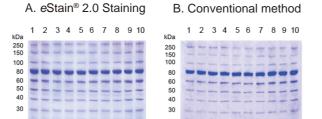
High staining efficiency

In addition to ease and convenience, the eStain® 2.0 Protein Staining System provides high detection sensitivity comparable to that of traditional tri-step method (Figure 4). In the end, you'll see sharp protein bands out of clear background.

Fits various types of mini gels

The eStain® 2.0 Protein Staining System is designed to work with multiple types of mini polyacrylamide gels, including Tris-Glycine, Bis-Tris, Tris-Tricine, and Tris-Acetate gels, *etc*.



Conventional Coomassie blue Staining

Figure 4. High staining efficiency achieved using the eStain® 2.0 System. 7ul Protein Ladder was loaded in each lane and separated on 4-20% Express PAGE (Bis-Tris) Gels. The gel was stained either by eStain® 2.0 Protein Staining System (A) or by conventional Coomassie blue staining method (B) with CBB R-250.

Ordering Information

Product	Size	Cat. No.
eStain® 2.0 Protein Staining Device	1 unit	L02016
eStain® Protein Staining Pads (R-250, 20-pak)	1 box	L02011
eStain® Protein Staining Pads (R-250, 40-pak)	2 × 1 box (20-PAK)	L02011-2
eStain® Protein Staining Pads (G-250, 20-pak)	1 box	L02012
eStain® Protein Staining Pads (G-250, 40-pak)	2 x 1 box (20-PAK)	L02012-2
Graphite Electrode	1 unit	L02017

For more information, visit http://www.genscript.com/estain_protein_staining_system.html



Automatic 7-min protein gel staining

eStain® 2.0 Protein Staining System







eStain® 2.0 Protein Staining System

- Fastest—complete protein gel staining in 7 minutes or less
- Easier—press run button and walk away
- Cleaner—no additional buffers required
- Safer—proprietary formulation without methanol ★

Coomassie blue staining is the most common in-gel protein detection method. Even though traditional tri-step method offers good detection sensitivity, it is time-consuming and generates much hazardous waste. With state-of-the-art instrument and ready-to-use reagents from GenScript, you can significantly reduce the time spent on this task. The revolutionary eStain® 2.0 Protein Staining System cuts gel staining time from hours down to seven minutes or less. The cutting edge electric staining technology ensures a faster and simpler method for protein gel staining time after time. (Table 1).

Table 1 - Faster protein gel staining with the eStain® 2.0 Protein Staining System

	eStain® 2.0 Protein Staining System	Conventional Coomassie blue Staining	Competitor 1	Competitor 2 (Basic Protocol)*
Wash or Rinse Step	0 min	Rinse 15 min	Wash 15 min	Wash 15 min
Stain Step	Electric Staining 7 min	Stain 1 – 3 hr	Stain 1 hr	Stain 15 min – 1 hr
Destain or Rinse Step	0 min	Wash 1 – 3 hr	Rinse 30 min	Destain 1 – 2 hr
Total time	9 min	2 hr, 15 min – 6 hr, 15 min	1 hr, 45 min	1 hr, 30 min – 3 hr, 15 min
Time saved with eStain® 2.0 System		2 hr, 5 min – 6 hr, 5 min	1 hr, 35 min	1 hr, 20 min – 3 hr, 5 min

^{*} Competitor 2 also uses a microwave protocol which takes 15 to 30 minutes, but often gives high blue background and requires extend destaining. It sometimes burns the gels.

Innovative electric staining system for faster, more convenient protein gel staining

The eStain® 2.0 Protein Staining System (Figure 1), applying GenScript's patent-pending electric staining technology, enables you to quickly, reliably and efficiently stain protein gels with Coomassie blue dye in 7 minutes or less. As a user-friendly unit, the eStain® 2.0 Protein Staining Device uses disposable eStain® Protein Staining Pads containing proprietary electrode buffers with Coomassie blue dye in the cathode pad, offering easy and convenient procedures without the need for additional buffers.



Figure 1. The eStain® 2.0 Protein Staining System. A. The eStain® 2.0 Protein Staining Device. B. The eStain® Protein Staining Pads.

Shortened workflow increases your productivity

The eStain® 2.0 Protein Staining System combines three steps of traditional Coomassie blue staining method into one single step and greatly cuts down the staining time for protein gels (Figure 2). The gel staining is finished so fast that you can almost see the staining results immediately after electrophoresis.

Titanium Cathode 2e' + 2H₂O → H₂ + 2OH E E CBB dye CBB dye CBB dye Pre-run gel CBB dye Graphite Anode 4OH' → O₂ + 2H₂O + 4e'

Figure 2. How the eStain® 2.0 Protein Staining System works. A certain voltage is applied to the graphite anode and the titanium cathode, driving the negatively charged Coomassie blue dye R-250 or G-250 into the gel matrix between the eStain® Pads to stain the proteins and pushing the free staining reagents out of the gel matrix to destain the gel.

Optimized self-contained system offers easy, clean, and safe procedures

The eStain® 2.0 Protein Staining System is created as a self-contained system. The ready-to-use and disposable eStain® Protein Staining Pads contain the required electrode buffers with Coomassie blue dye incorporated in cathode pad. No additional buffers are required. These make the staining process much cleaner. No more messy! Furthermore, the proprietary formulation does not contain methanol, and the used eStain® Pads need no special treatment before disposal. It is safer and greener. With eStain® 2.0 System, all you need to do is to simply assemble the eStain® Pads together with the pre-run gel and press the run button (Figure 3).

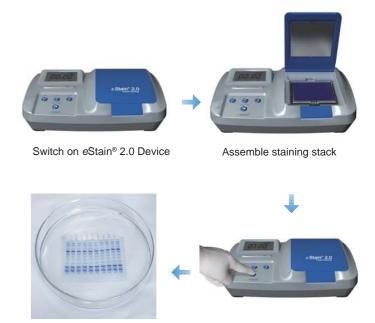


Figure 3. Schematic workflow of eStain® 2.0 Protein Staining System.

See staining results



Hit the button and run 7-min